

**REMARKS/ARGUMENTS**

Applicants respectfully request reconsideration of the present application in view of the following reasons. Claims 1-10 and 15 are pending in this application.

For at least the following reasons, Applicants respectfully request withdrawal of the finality of the rejection and allowance of the pending claims.

**I. Finality of Office Action Inappropriate Since Previous Office Action Failed to Respond to Applicants' Arguments**

In the Amendment accompanying the RCE filed on August 27, 2007, Applicants amended the claims and argued for the patentability of the claims (in their present form and as amended on August 27, 2007), in view of European Patent Application No. 1,071,296 to Leroy et al. (hereinafter "Leroy"). In the Office Action dated March 20, 2008, the Examiner acknowledged Applicant's Response filed on December 21, 2007; however, the Examiner failed to respond to Applicants' arguments with respect to Leroy, making the Office Action of March 20, 2008 incomplete. "*Where the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it.*" (MPEP 707.07(f).)

For the first time, the present Office Action now addresses Applicants' arguments with respect to Leroy. As such, the rejections of the present Office Action should not be final. Applicants respectfully request withdrawal of the finality of the rejection.

**II. Claim Rejections Under 35 U.S.C. § 102(a)**

On page 2 of the Office Action, Claims 1-10 and 15 were rejected under 35 U.S.C. § 102(a) as being anticipated by Leroy. Applicant respectfully traverses the rejection.

The Examiner's "Response to Arguments" on page 4 of the Office Action notes:

In response to the Applicant, Leroy disclosed a private multi-cast address (PR-MCA) wherein this is a destination address of a mobile device.

However, independent Claims 1 and 15 include “**unicast destination address**” and not only a “destination address.” To apply the teachings of Leroy regarding a multi-cast address is to ignore the term “unicast” preceding “destination address” in the claims. A multi-cast address is not the same as a unicast destination address.

While not limiting the claims in any way, paragraphs [0037] and [0038] of Applicants’ specification describe a representative embodiment where “the incoming data packet at the AR 20 is not a multicast data packet but a unicast one” and:

[0038] In the following, the case of a **received unicast IP data packet** is described with reference to FIG. 1. When the AR 20 cannot determine a link-layer address based on the given network-layer address, e.g. IP address, received in a header portion 61' of the received IP data packet with a payload portion 62', it recognizes that a packet has to be sent using the above multicast mechanism according to the present invention. To achieve this, the AR 20 generates a link-layer frame 70' with a broadcast link-layer address in its header portion 71' and the neighbor solicitation message in its payload portion 72'.

(emphasis added.) Thus, in the embodiment described here, a unicast data packet is received and a link-layer frame is generated including both a broadcast address and the unicast destination address.

Leroy does not teach or suggest “receiving the data packet, wherein the data packet includes a **unicast destination address**” in independent claim 1. Furthermore, Leroy also does not teach or suggest “generating a link-layer frame, wherein the link-layer frame includes a broadcast address **and** the **unicast destination address**” in independent claim 1. **Leroy simply does not receive a unicast destination address and it simply does not generate a link-layer frame having a unicast destination address.** A rejection under 35 U.S.C. § 102(a) requires exact correspondence of each and every claim element. Accordingly, the § 102 rejection of claim 1 based on Leroy cannot be properly maintained.

Applicant respectfully requests withdrawal of the rejection.

Similarly, independent Claim 15 includes, in part:

a receiving unit configured to receive the data packet, wherein the data packet includes a **unicast destination address** corresponding to a mobile node ...

an addressing unit configured to generate a link-layer frame if the link-layer address corresponding to the mobile node is not available, **wherein the link-layer frame includes the unicast destination address** and a broadcast address

(Emphasis added). For at least the same reasons discussed with respect to independent Claim 1, independent Claim 15 and Claims 2-10 that depend from independent Claim 1 are not anticipated by Leroy.

Even if, *arguendo*, the Examiner were to consider an obviousness analysis of the claims based on Leroy, there is sufficient discussion of the benefits of multi-casting in Leroy that it would be considered “teaching away” from the use of a unicast destination address. For example, in paragraph [0006] of Leroy, one of the paragraphs cited by the Examiner in support of the rejection, it states:

[0006] Indeed, by **multi-casting the internal data packets** ... that tunnel external data packets ... that belong to an external multi-cast connection, **it is avoided that the same public data packets are duplicated** and encapsulated in different private data packets that are transferred over at least partially common routes in the mobile data network.

(emphasis added.) Thus, Leroy teaches that “multi-casting the **internal** data packets” avoids the inefficient duplication of data packets that are transferred over common routes in a data network. Such a teaching would not suggest receiving a unicast destination address or much less generating a link-layer frame that *includes* a unicast destination address within it.

For at least the reasons set forth above, Applicants respectfully submit that Leroy does not teach each and every element as recited in independent Claims 1 and 15. Applicants respectfully request withdrawal of the rejection of Claims 1 and 15 under 35 U.S.C. § 102(a). For at least the same reasons, Applicants respectfully request withdrawal of the rejection of Claims 2-10, which depend from Claims 1.

B. Claim 2

Claim 2 recites, in part, that the “broadcast address is predefined.” In the Office Action dated 3/20/2008, the Examiner relied on paragraph [0031] of Leroy, asserting that it teaches a predefined broadcast address. Now, the Examiner points to paragraph [0022] of Leroy and in the Examiner’s “Response to Arguments” on page 4 of the Office Action, the Examiner says that the “public multi-cast address PU-MCA is predefined within the data packet.” Paragraph [0022] of Leroy indicates that “the sender of the IP data packet PU-DP will embed an internet multi-cast address PU-MCA in the destination address field of that IP data packet PU-DP.” However, there is no mention of the internet multi-cast address PU-MCA being “predefined,” as in Claim 2. Thus, Applicants respectfully submit that Claim 2 is in condition for allowance, and request withdrawal of the rejection.

C. Claim 3

Claim 3 recites, in part, “determining that the at least one access device supports the mobile node,” and “forwarding the link-layer frame to the mobile node.”

In the instant Office Action, the Examiner has cited paragraphs [0002], [0024] and [0030] of Leroy, and asserts that “it is clear that MS register with SGSN.” Applicants respectfully disagree. *Even assuming* that Leroy teaches the claimed “link-layer frame” (which, because the claimed link-layer frame includes a **unicast destination address** as discussed above, it does not), Leroy does not teach or suggest “forwarding the link-layer frame to the mobile node.” Paragraph [0030] explains that:

**If the second mobile station MS2 wants to be come member of the multi-cast group** with internet multi-cast address PU-MCA, **it will send a public join message** to the service node SGSN3 in whose service area the mobile station MS2 is residing. ... The private multi-cast tree in GPRS-SYSTEM is updated so that **the internet data packets PU-DP addressed to the internet multi-cast address PU-MCA will be routed to the mobile station MS2.** ... this multi-cast group is addressed within the GPRS-SYSTEM with private multi-cast address PR-MCA that is linked to the public multi-cast address PU-MCA via a table PU-PR-TABLE in the gateway node GGSN1 ...

(emphasis added.)

Thus, mobile station MS2 receives the internet data packets PU-DP but the “multi-cast group” addressed with “private multi-cast address PR-MCA that is linked to the public multi-cast address PU-MCA” is not sent to mobile station MS2 but rather is kept “within the GPRS-SYSTEM.” There is no suggestion of forwarding a link-layer frame to the mobile node, as in Claim 3.

For at least these reasons, Applicants respectfully submit that Claim 3 is in condition for allowance, and request withdrawal of the rejection.

D. Claim 5

Claim 5 recites, in part, that the “broadcast address is a link-layer address.” The Examiner has relied upon paragraphs [0031]-[0034] of Leroy, and asserts that Leroy teaches these elements. Applicants respectfully disagree. On page 2 of the Office Action, the Examiner identifies public multi-cast address PU-MCA as a broadcast address. Nowhere does Leroy suggest that public multi-cast address PU-MCA is a link-layer address.

In the Examiner’s “Response to Arguments” on page 4 of the Office Action, the Examiner refers to the “well known radio access network is of an open system interconnection (OSI) model, wherein such model describing a physical layer, data link layer, network layer.” However, there is no teaching or suggestion in Leroy that public multi-cast address PU-MCA is part of a data link layer.

For at least these reasons, Applicants respectfully submit that Claim 5 is in condition for allowance, and request withdrawal of the rejection.

E. Claim 7

Claim 7 recites, in part, that the “**unicast** destination address is a network layer address” (emphasis added). On page 3, lines 10 and 11 of the instant Office Action, the Examiner asserts that paragraph [0031]-[0034] of Leroy disclose “wherein said *multicast* destination address is a network-layer address...” (emphasis added). As with Claim 1, a *multicast* destination address is not the same as the claimed *unicast* destination address. Leroy never suggests a **unicast** destination address.

In the Examiner's "Response to Arguments" on page 4 of the Office Action, the Examiner refers to the "well known radio access network is of an open system interconnection (OSI) model, wherein such model describing a physical layer, data link layer, network layer." However, there is no teaching or suggestion in Leroy that private multi-cast address PR-MCA is part of a network layer.

For at least these reasons, Applicants respectfully submit that Claim 7 is in condition for allowance, and request withdrawal of the rejection.

F. Claims 8, 9, and 10

Claim 8 recites, in part, that the "the data packet further comprises a payload, and further wherein the payload is included in the link-layer frame." Claim 9 recites, in part, "encapsulating said data packet into the link-layer frame." Claim 10 recites, in part, that the "link-layer frame is discarded by an access device from the plurality of access devices if the access device does not support the mobile node." As discussed above, Leroy is silent with respect to the claimed "link-layer frame," and thus cannot possibly have taught that features of Claims 8, 9, and 10 involving the "link-layer frame." Applicants respectfully submit that such disclosure is not present in Leroy. For at least these reasons, Applicants respectfully submit that Claims 8, 9, and 10 are in condition for allowance, and request withdrawal of the rejections.

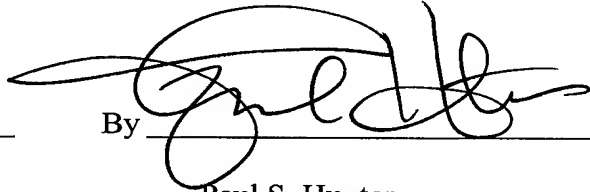
Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C. F. R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to

charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C. F. R. §1.136 and authorize payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Paul S. Hunter', written over a horizontal line.

By

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